232 Philetairus socius geminus Grote, Journ. f. Ornith., vol. lxx, 1922, p. 45: Okaukuejo, Etosha Pan National Park, northern Namibia.

Compared with P. s. eremnus differs in ranging a little paler over the pileum; mantle (including scapulars) lighter, the sub-terminal crescents blacker and sharply contrasted against the whitish apical fringes, and rump whiter. Facial and light ventral surfaces much whiter. Wings and tail colder, with the coverts and remiges edged paler. Similar in size to the northern population of eremnus. Differs from P. s. xericus in having the dorsal crescents deeper black and the mantle feather apices whiter. Facial and light ventral parts still whiter, and lacking the drab overlay to the breast present in xericus. Size smaller than in xericus.

Measurements. See Table 1. 8 specimens examined.

Range. Confined to the Etosha Pan National Park, northern Namibia, with most of the available records from Okaukuejo and Leeubron.

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Amazona auropalliata caribaea: a new subspecies of parrot from the Bay Islands, northern Honduras

by Sebastian Lousada

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In November 1987, S. Lousada, A. Morales and S. Ewing travelled to Honduras to investigate the distribution of Yellow-naped Parrots Amazona auropalliata. Our field work revealed 3 distinct forms of the subspecies A. a. parvipes inhabiting northern Honduras and the offshore islands. After discussions and correspondence with Burt L. Monroe and Thomas R. Howell, who first described A. a. parvipes from the Mosquitia region of eastern Honduras and northeastern Nicaragua, we concluded that there was evidence to describe one of these forms as a new subspecies:

TABLE 1
Typical soft-part colours of northern forms of the Amazona ochrocephala complex

Subspecies	Upper mandible	Lower mandible	Cere	Bristles	Eve-ring	Eye-lid edge
					_,	
A. oratrix	V.P.H.	V.P.H.	White	White	White	White
A. o. belizensis	V.P.H.	V.P.H.	White	White	White	White
A. o. belizensis	V.P.H.	V.P.H.	Glauc.	White	White	Black
(NW Honduras)						
A. a. auropalliata	Variably	B.N.G.	Glauc.	Black	P.G.	Black
	dark					
A. a. caribaea	P.H., M.P.	Mostly	Glauc.	Black	P.G.	Black
	at tip	P.H.				
A. a. parvipes	P.H., M.P.	B.N.G.	Glauc.	Black	P.G.	Black
(Mosquitia birds)	at tip					

Notes. Immature birds of all these forms have darker areas on their mandibles. Colours from Smithe (1975, 1981): V.P.H. = very Pale Horn (92); P.H. = Pale Horn (92); Glauc. = Glaucous (80); M.P. = Medium Plumbeous (87); P.G. = Pearl Gray (81); B.N.G. = Blackish Neutral Gray (82).

Bristles = bristle-like feathers of the cere.

Amazona auropalliata caribaea subsp. nov.

Holotype. Carnegie Museum of Natural History No. 131584; adult ♀ from Isla Barbareta, Islas de la Bahia, Honduras, 11 April 1948; collected by

A. C. Twomey.

Diagnosis. Differs from the type of A. a. parvipes of northeastern Honduras and northeastern Nicaragua in having a predominantly ivory-coloured bill closest to Pale Horn (92). (Capitalized colours from Smithe 1975, 1981.) The tip of the upper mandible is often Medium Plumbeous (87), especially in immature birds, which may have larger areas of this colour. The lower mandible is always much paler than that of parvipes of the Mosquitia region, which is generally Blackish Neutral Gray (82). (See Table 1).

A. a. caribaea also differs from the pale-billed, yellow-crowned and yellow-naped forms found in the Sula Valley of northern Honduras; fledgling A. a. caribaea have very little or no yellow in the head region, whereas the Sula Valley birds always leave the nest with yellow foreheads and crowns.

Distribution. Known only from Roatán, Barbareta and Guanaja of the

Bay Islands off the northern coast of Honduras.

Description of holotype. General plumage Parrot Green (260). Lime Green (159) on underparts, but slightly more Cyan (164) on lores and forehead. Crown and forecrown have a narrow Sulfur Yellow band (157) running dorsally; nape and hindneck have a broad Spectrum Yellow band (55) across them, the green feathers in this region lightly margined in Blackish Neutral Gray (82). Bend of wing, Geranium Pink (13); carpal edge Lime Green (159); primaries and secondaries Parrot Green (260) becoming Indigo Blue (173) towards tips; the wing speculum, across bases of the 5 outer secondaries is Geranium Pink (13); under wing coverts and undersides of flight feathers Paris Green (63); dorsal major secondary caudal coverts towards Chartreuse (158). Tail, Parrot Green

234 TABLE 2

Selected measurements (mm) of Amazona a. auropalliata, A. a. parvipes and A. a. caribaea

		Wing Tail (chord)		Culmen (from nostril)	Middle toe (without nail)	
auropalliata	18 ≤ ♂♂ (mean)	228.6	123.6	34.4	37.6	
	15 ≤ ♀♀ (mean)	220.7	121.7	32.6	35.8	
parvipes	1 ♂ (type)	226.0	118.5	30.9	33.0	
	1 ♂ (Sula Valley)	207.0	131.0	33.0	30.0	
	1 ♀ (Sula Valley)	220.0	115.0	33.0	30.0	
caribaea	1 ♀ (type)	217.0	125.0	33.0	31.3	
	1 ඊ	210.0	125.0	27.7	30.7	
	1 ඊ	210.0	120.0	32.3	32.9	
	1 ඊ	230.0	140.0	33.2	31.5	

(260) tipped with Chartreuse (158), lateral feathers basally marked with Geranium Pink (13) and Sulfur Yellow (157) on inner webs, the outermost feathers lightly edged with Spectrum Blue (69). Mandibles closest to Pale Horn (92), edged and tipped very lightly in Medium Plumbeous (87).

Measurements. See Table 2. Note that A. a. caribaea and A. a. parvipes have smaller feet than A. a. auropalliata.

Specimens examined. A. a. caribaea:— HONDURAS: Isla Barbareta, 3 (CM = Carnegie Museum); Isla Guanaja. 1 (CM); Isla Roatán, 5 (BMNH = British Museum of Natural History, Tring). A. a. parvipes:—NICARAGUA: Leicus creek 56 miles NW Puerto Cabezas (UCLA = University of California, Los Angeles: Holotype, no. 51465, adult.). HONDURAS: Sula Valley, 2 (CM).

I have also examined a series (20+) of A. a. auropalliata from Mexico, Guatemala, El Salvador, Nicaragua (BMNH) for comparison.

Etymology. This subspecies is named in recognition of the prominent role the tree species *Pinus caribaea* plays in the ecology of these birds.

Remarks

Variation within the subspecies. Variation among individuals of A. a. caribaea is most usually in the quantity of yellow feathers in the head region. However the key features were manifest in all the 60 individuals (9 museum skins, 51 captive birds) I have examined.

There appear to be no sexual differences in plumage colour or pattern, although there are noticeable differences that can be correlated with age. Before their first moult, young A. a. caribaea have little or no yellow on the nape or crown, and mandibles with at least some Medium Plumbeous (87) colouring. As they age, over the next few moults, yellow gradually comes in on the nape and also usually on the forecrown, where it is frequently present as a narrow band or a roughly triangular patch. Mature specimens have large yellow nape and hindneck patches that may encircle the neck to quite a considerable extent. Any Medium Plumbeous (87) colouration on the mandibles may gradually decrease in area and change to ivory or Pale Horn (92).

Ecology. The Caribbean Pine Pinus caribaea plays a prominent part in the ecology of these birds, providing nesting sites, food and shade. Twice a bird was seen on Isla Guanaja eating parts of 2 pine cones, probably the immature seeds (26% protein, 2% carbohydrate, 26% fat: per Rosemarie Gnam). Apparently during most of the year this is their sole food source, although farmers reported significant damage done to various fruit trees when in season, a habit which unfortunately leads to persecution. Three nest sites of A. a. caribaea were examined, all of them in the hollow trunks of Pinus caribaea trees.

Island residents report that birds start to search for suitable nest sites in February and March (per Spicer Wood). Dead trees are given much attention, including exploratory chipping in an effort to break into the hollow centres or to enlarge existing cavities. A clutch of 2–3 is laid in

March or April.

Conservation. Isla Guanaja and Barbareta still have adequate parrot habitat due to the low economic value of existing timber. On the larger and more fertile Isla Roatán (c. 130 km²) there has been considerable development for tourism and a resulting increase in human population, which has led to destruction of forests and so may have affected the parrot population. However, on all these islands the robbing of nests to provide young birds for the pet trade is commonplace and has had a major and far more adverse impact. Indeed, on Isla Guanaja (c. 56 km²), at least 60 chicks were collected by one individual during the 1987 season (per Spicer Wood).

Due to the fact that young birds have little or no yellow on the nape or hindneck, it is fairly easy to recognize the fledglings of these birds. As was the case in Puerto Rico in the 1940s (Snyder et al. 1987), it seems that virtually 100% of the nestling parrots are taken for the pet trade despite the fact that these "isleña" birds are legally protected against export under Honduran law. Since this practice frequently involves destroying the nest holes, the populations are likely currently to be made up mainly of mature birds competing for fewer nest sites. Unless action is taken immediately and parrot reserves recognized and protected, their future is greatly imperilled.

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